Testing the accuracy of text deconstruction using PTree tool.

Abstract

Our research project is currently to develop an Automatic Concept Relation Extraction (ACRE) System which automatically extracts concepts and their relationships across texts in all domains of knowledge. Concept Relational Tree (CRT) is one of the text analyzer applications used in the ACRE System to automatically extract concepts and their relationships in a document. To check on the correctness of the extraction of concepts and their relationships, the PTree is designed to reconstruct the text by reverse input. In this paper we present the PTree tool to test the accuracy of the automatic tagging and tree structure created by CRT from texts. The PTree tool is implemented from Java Universal Network/ Graph Framework (JUNG) libraries. This tool provides a few functions to allow for flexibility in drawing parse trees for concept relationships. Due to its flexibility and dynamic features, PTree can be further extended for us e in the deconstruction of highly complex texts.